GrummanWorld

Volume 4, Number 12 November 8, 1985

Navy Gives Thumbs Up At A-6F Mock-up Inspection

A team of Grumman mechanics recently spent three days demonstrating to approximately 50 Navy engineers just how easy it will be to service and maintain the new A-6F Intruder.

The demonstration took place at the A-6F Avionics and Propulsion Mock-up Inspection held October 22-24 at Calverton Operations on Long Island.

"The mock-up review gives the Navy and Grumman an early look at the maintainability of the new Intruder," said Capt. Roy Buehler, Navy program manager.

Buehler noted that improving maintainability is one of the primary objectives of the A-6F Upgrade Program. "This inspection is a good way of assuring that we're going about the upgrade the right way – that is, according to the Navy's specifications."

For the mock-up, an A-6F fuselage, complete with cockpit, nose and tail sections, was constructed from available A-6E and EA-6B parts. Components and compartments for A-6F avionics and propulsion systems were built into the model and equipment was installed as it will be on the upgraded Intruder.

The team of Grumman mechanics removed and replaced avionics computers, radar equipment and the aircraft's engines and propulsion system while the Navy visitors peered intently over their shoulders. The mechanics also displayed the loading and unloading of bombs and a 400 gallon external fuel tank on the mock-up's half-wing stubs. Those inspectors not able to watch from close up followed the demonstrations on remote video monitors.

The three-day inspection also included demonstrations of standard maintenance and repair work using only the support equipment that Navy mechanics on carriers would be likely to have. Mechanics demonstrating maintenance work on the nose radome and forward equipment compartments used steps built into the access panel doors for the sections. The steps eliminate the need for ladders or platforms.

"When you're working on a carrier deck, you don't want to be dragging around any extra gear," said Dick Feyk, A-6 Program deputy director. "We've designed the aircraft so that mechanics have easy access to all the systems and equipment that may need servicing. Fast and easy field maintenance makes an aircraft less expensive to operate, and that's what the Navy is looking for."

Commander John Ertlschweiger, A-6F Program Class Desk Officer, said that the Navy was enthusiastic about the mock-up inspection. "It gives us a chance to have some direct input into the aircraft's design, while the work is in progress." ■

Bang Up Mock-up. *Approximately 50 Navy engineers were at Calverton Operations on Long Island recently for the A-6F Avionics and Propulsion Mock-up Inspection. (Above) Navy visitors watch as Grumman technicians (L to R) Mike Remski, Ed Gagnon Jr., Ray Oudeans demonstrated maintenance techniques on the Intruder Mock-up. (R) Navy representatives inspect the A-6F's forward equipment compartment access door.*

Third Quarter Earnings Drop Tied To F-14 Bulkhead Settlement

On October 31, Grumman reported net income of $8.3 million or 24 cents per share on sales of $775.9 million for the third quarter of 1985. For the same period in 1984, sales were $659.9 million and net income was $29.8 million or 99 cents per share.

Third quarter results include a charge of $30 million or 56 cents per share, representing the estimated cost to fulfill an agreement with the U.S. Navy reached on October 30.

For the first nine months of 1985, sales of $2.3 billion produced net earnings of $58.4 million or $1.89 per share. During the same period last year, sales totaled $1.9 billion for a net income of $80.3 million or $2.68 per share.

Aerospace sales increased about $382 million of which approximately $171 million was attributable to the F-14D and A-6F development programs which continued to be performed at no profit. The delivery of five C-2A Greyhound aircraft added about $170 million to sales in the 1985 period.

Despite the increased sales, Aerospace operating profits affected by the $30 million F-14 bulkhead charge and substantial expenditures for various research and development programs were $27.1 million lower than last year.

Non-aerospace sales and operating profits increased by about $46 million and $5 million respectively as a result of improved performance in data systems services, and aluminum truck body operations.

Interest costs of $23 million for the first three quarters were $14.7 million higher than in the comparable 1984 period.

Grumman Chairman Jack Bierwirth said, "We should not allow lower earnings to overshadow Grumman's overall financial health. We have a substantial, funded backlog of $5.6 billion. The full scale development programs for upgraded F-14s and A-6s are progressing, with deliveries of each of these new models scheduled to begin by the end of the current decade.

"The Air Force recently awarded Grumman a $657 million contract for development of the Joint Surveillance Target Attack Radar System (Joint STARS). In addition, we are competing for a number of NASA and military space programs, any of which could be significant. We are also encouraged by progress in expanding our activities in the growing automatic test equipment field. Grumman Data Systems continues to broaden its operations and, in our Allied Division, we are anticipating a favorable decision by the U. S. Postal Service on the long life delivery vehicle.

"We remain confident that such developments coupled with our growing technological capabilities will produce a stronger, more profitable business base for the future." ■

Navy Resumes Acceptance of Grumman F-14s

The U.S. Navy and Grumman Corporation reached an agreement on October 30 to resume Navy acceptance of F-14 aircraft. The agreement includes the strengthening of an F-14 fuselage bulkhead to improve its service life.

After cracks were discovered in a bulkhead of some fleet aircraft, acceptance of new F-14 aircraft was stopped on April 29, 1985, until Grumman could determine the cause of the problem and develop a solution suitable to the Navy. Fleet aircraft were not grounded for this problem.

Future production aircraft will have a redesigned bulkhead with extended service life. Affected fleet aircraft will have a reinforcement installed by mid-1986.

Grumman and Navy field teams have begun installing the reinforcement in the 248 affected fleet aircraft. New F-14 aircraft are now being accepted by the Navy.

What's Inside

Revamped Telemetry System Will Monitor Five Aircraft At Once – Page 3

Fighting Hunger: Grumman Launches Food Collection Drive – Page 4

Sixteen Grummanites Become Division Officers – Page 6

Sturgis Reinvents The Assembly Line

STURGIS, Mich. – A new production line designed to "mass produce" vehicles for fleet truck orders is going full speed at Allied-Olson's Plant 5 in Sturgis, Michigan. The plant was purchased in late 1984 and began operating in early 1985.

Though commonplace in the automobile industry, the concept of a standardized assembly line is new at Olson. "A large percentage of our business has always been custom designed trucks," says Larry Parsons, general manager at Sturgis. "Obviously, a customer who delivers bread needs a different truck from one who services oil burners or one who serves hot food on the roadside."

However, in the past several years, more and more of Olson's business has come from fleet operators – and fleet orders for hundreds of trucks call for standardized production processes.

In Plant 5, truck chassis are mounted on rails bolted to the shop floor. As the chassis move from station to station on the rails, teams of mechanics, welders, and wirers swarm over the chassis, literally building the truck bodies from the ground up.

Major assemblies for the truck bodies, such as windshield frames, door, wall and floor panels, are manufactured at work stations close to the line. This reduces handling time significantly.

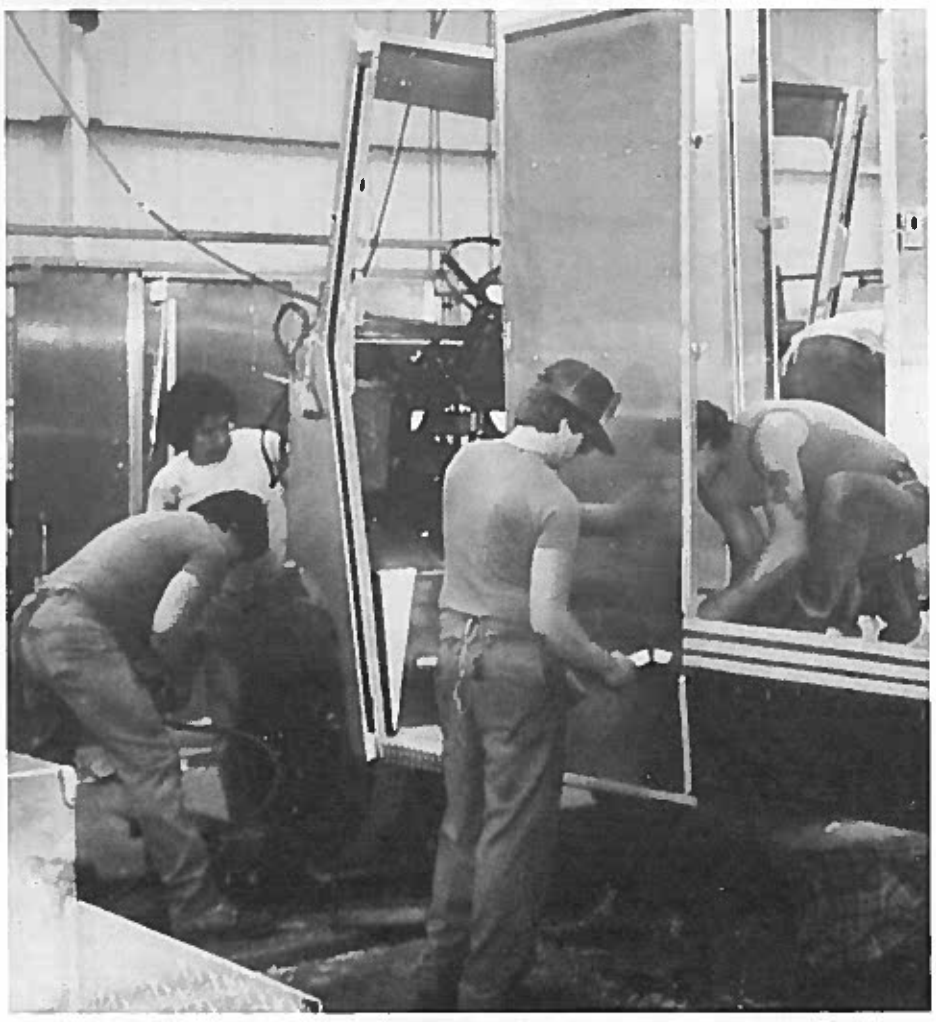
"Everyone knows his job," adds Parsons, "and constant practice increases proficiency. It didn't take long for us to get it down to a science – we can really move now."

Parsons notes that the new fleet truck line is 20 percent faster and more efficient than the customized truck line in Plant 1.

In Olson's original plant, the truck bodies are built on a stationary master jig. The aluminum shell is then placed on a chassis which is later driven from station to station.

"We build the trucks one at a time in Plant 1 because each one is different from the next. It takes longer, but that's the nature of the custom truck business," says Parsons.

Allied-Olson expects to produce more than 12,000 trucks in 1985 at Sturgis, and at the company's four other plants in Sherman, Texas; Tulare, California; Mayfield and Montgomery, Pennsylvania. ■



Trucking On Down The Line. *Mechanics (L to R) Dwayne Scalzo, Mike Dunkel, Rich Finney, and Denny Gaylord team up to assemble a Kurbmaster aluminum truck body on the new standardized production line at Allied Olson's Sturgis, Michigan headquarters. The new production line was added to handle large fleet orders.*

Take A Day Off From Smoking

You've been putting it off for ages. You want to do it. You know you should do it. Well, now it's time to get it done – to kick the cigarette habit and stop smoking for good.

That's the message of the ninth annual Great American Smokeout being held on Thursday, November 21. The Smokeout is sponsored by the American Cancer Society to encourage smokers to give up cigarettes for one full day – even if only to prove to themselves that they can.

According to the American Cancer Society, last year more than one-third of the smokers in America put down their cigarettes on Smokeout Day. A Gallup poll indicated that 10 percent – about 5.4 million people – succeeded for the full 24 hours, and of those, 3.1 million were reportedly still not smoking five days later.

The Grumman Medical Department is gearing up to help make the Great American Smokeout a success for Grummanites throughout the company. Nurse stations at all company facilities will offer literature from the American Cancer Society and the U.S. Department of Health and Human Services. The literature provides valuable tips on how to succeed at quitting.

"We'll also be there to offer moral support and encouragement to those Grummanites who make the effort to clean up their lungs," says Ada Colter, coordinator, Nursing Services.

Statistics provided by the National Cancer Institute in Bethesda, Maryland indicate very clearly that giving up cigarettes is in the best interests of everyone. According to the Institute's figures, smoking-related disorders, including heart disease and other illnesses, cause 32,000 premature deaths each year and account for an incredible $27 *billion* in medical costs.

Workers who smoke have an absenteeism rate 30 to 40 percent higher, and have a five percent greater chance of hospitalization than nonsmokers. Coupled with the sky-high medical bills, the loss of productivity due to smoking-related illness costs the nation close to $50 billion per year.

The risk of developing lung cancer is 10 times greater for smokers than nonsmokers. And those who smoke two or more packs of cigarettes a day are 15 to 25 times more likely to die of lung cancer than nonsmokers.

The American Cancer Society is also alarmed about two new trends – the increase in lung cancer for women smokers and the rise in production and use of smokeless tobacco.

For the first time in U.S. history, lung cancer has caught up with breast cancer as a leading cause of death among women. By the end of 1985, it is expected to be the number one cancer killer of American women.

Estimates show that nearly 2,000 adolescent females initiate smoking in the U.S. every day. The overall death rate of women – even young women – who smoke and use birth control pills is much higher than that of nonsmoking pill users.

Women who use oral contraceptives and smoke also have a much higher risk of blood clots in their legs, strokes, and heart attacks. In addition, women smokers have nearly three times as much bronchitis and emphysema, about 75 percent more chronic sinusitis and 50 percent more peptic ulcers than those who do not smoke.

With all the negative publicity smoking has received, cigarette companies have turned to promoting smokeless tobaccos, such as snuff and chewing tobacco. Drawing heavily on a historic connection with sports figures and 'macho Wild-West' themes, the sale of these tobacco products, primarily to young males, has been increasing about 11 percent each year.

Directly related to that increase is a rise in mouth cancers – including lip, tongue, cheek and gum – that often result in disfigurement and even death in young men.

Ultimately, the sheer weight of evidence against using tobacco – whether smoking or smokeless – should be enough to convince a user to quit. But, while there is no shortage of reasons to kick the habit, there is often a shortage of will power. That is what the Great American Smokeout is all about: gathering all your courage and strength for one full day of abstinence. Who knows?, it could be the start of a smoke-free life. ■

Tips For Kicking The Habit

If you plan to participate in the Great American Smokeout, on Thursday, November 21, 1985, the main things you'll need are a lot of courage and will power. However, the American Cancer Society would like to make the task a little easier by offering a few tips on how to get through the day without your butts:

- Throw away all your cigarettes and matches and hide all smoking paraphenalia – ashtrays, lighters, etc.
- Lay in a supply of sugarless gum, carrot sticks, lemon drops or lollipops. Take one in place of a cigarette whenever you get the urge to light-up.
- Drink lots of liquids, but pass up coffee and alcohol.
- When the urge to smoke hits, take a deep breath, hold it for 10 seconds, and release it slowly. Concentrate on something else.
- Exercise to relieve the tension – take a long walk, go bike riding, jog.
- Try the "buddy system," and ask a friend to quit too.
- Avoid places and situations you strongly associate with smoking, such as watching your favorite television program; sitting in your favorite chair; having a cocktail before dinner.
- Make a list of things you'd like to buy yourself or someone else. Estimate the cost in terms of packs of cigarettes, and resolve to put the money aside to buy these presents.
- Buy yourself a treat, or do something special to celebrate.

More Rapid-Fire Answers For Flight Test

Revamped Telemetry System Will Monitor Five Planes At Once

A new aircraft is being flight tested over the Atlantic Ocean. One hundred miles away, inside a building at Grumman's Calverton, Long Island, complex, 15 engineers are hunkered down in front of computer scopes and meters. They wear headphones and their words are spare: "Check." "Mark 10." "Recover."

One of them presses a button and alters his display. His neighbor swivels his chair over to a bank of a dozen pen-plot machines making simultaneous squiggles. Though cryptic to the unschooled observer, the data contains answers on everything from the aircraft's angle of attack during a crucial maneuver to the temperature of its engines after one hour in the air.

The flight test engineers work with Grumman's Automated Telemetry System (ATS), an elaborate array of electronic equipment that gathers information from airborne planes. Long recognized as the leader of the pack in the aircraft industry, the ATS is getting a $20 million upgrade to keep up with the ever-increasing sophistication of new aircraft.

Right now, the ATS can monitor two flights at a time – but when the upgrade is complete in 1987, it will be able to monitor five simultaneous test flights. The increase will come just in time for the rigorous F-14D and A-6F flight test programs, set for 1987.

The ATS, which occupies three floors of a wing in Plant 7, Calverton, is operated by Data Systems people for the Flight Test department, which is part of Aircraft Systems.

During a test flight, sensors aboard the plane transmit flight data back to the ATS. The ATS processes and displays the data instantly, on as many as 500 measurements. When the ATS was formed in 1969, it was the first of its kind to have this real-time computing capability.

"Calculations – answers – are displayed immediately," says Tom Kastner, manager – ATS for Grumman Aircraft Systems. "Without it, data gathered on the flight would have to be processed after the fact, and we'd all have to wait for the results. By knowing those facts at the point they occur, the pilot and the flight test crew can decide what's going to be done next. And of course, it's a great time-saver."

There are actually two separate upgrades under way; the most recent is specifically designed for the F-14D and A-6F.

Normally, Grumman test flies a new plane at Calverton, then turns the plane over to the Navy. The Navy does its round of tests at Patuxent River, Maryland; Point Mugu, California; and other test bases. For the F-14D and A-6F, however, all testing will be conducted at Calverton.

"The Navy specified Calverton as the single flight test site when it awarded the F-14D and A-6F contracts to Grumman in 1984," says Kastner. "The Navy views it as more cost effective to test aircraft in one place. And it selected Calverton as the best place to do that. As a result, we expect to double our flight test activity."

The renovations will also better equip Grumman for flight testing of the myriad avionic devices found on today's aircraft. When the ATS was first built, flight tests were still primarily concerned with airframe characteristics. The F-14D and A-6F, however, will have few structural changes. Most of the changes will be avionics-related.

The other current upgrade began six years ago and will wrap up in mid-1986. It involves replacing the ATS telemetry processing systems and control and analysis computers. These systems will first be used for next summer's F-14A + flight tests.

In computer-ese, the ATS is switching from centralized to distributed data processing. This means that its two big mainframe computers will be replaced by over 50 new mini- and microcomputers. Besides more than doubling the ATS's computing power, these new computers have fewer maintenance problems. The mainframes are fussy about dust, temperature and humidity.

"The distributed setup will provide greater reliability and flexibility in day-to-day operations," says Max Simpson, director – ATS for Grumman Data Systems. "Such a system is also easier to modify when new test requirements make that necessary."

The new systems offer yet another important feature: the ability to handle both classified and unclassified test flights at the same time. Although today's system can handle two simultaneous flights, all data must be fed into one computer. Security regulations state that if a classified flight is in progress, unclassified test flights must wait.

The Real Thing. *Above, test conductor Brian Beatty studies real-time flight test data using Calverton's Automated Telemetry System (ATS). At left, Nick Campitiello, Daniel McKittrick, and Beatty go over data gathered on strip charts.*

"That's a problem, since the workload is increasing considerably in the classified area," Simpson says. "In the new setup, classified data will just be channeled to a separate minicomputer."

The new ATS will benefit Grumman in ways other than its own flight test programs. Grumman Data Systems has successfully marketed products based on the present ATS.

"GDS has already supplied whole packages based on the current version to the Air Force and the Navy," says Kastner, citing installations at Edwards Air Force Base and Point Mugu, California, and Tullahoma, Tennessee, as examples. ■

Obituaries

Armand Affe, Field Administration/Regular Office, Plant 30, died Oct. 14 at the age of 59. He had been with the company since 1952 and resided at 35 Bushwick St., Melville, N.Y.

Robert J. Barbera, Inventory Planning and Analysis, Plant 30, died Oct. 1, at the age of 31. He had been with the company since 1972 and his address was P.O.Box 3, Great River,NY

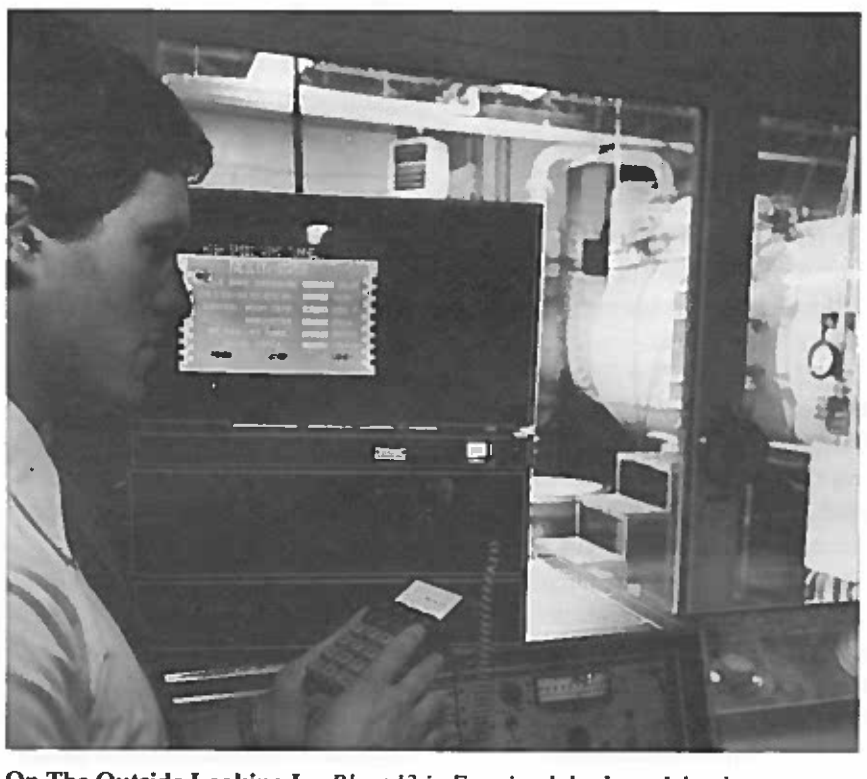
Charles Butterick, Final Assembly Inspection, Plant 6, died Oct. 17, at the age of 63. He had been with the company since 1958 and resided at 125 Tree Rd, Centereach, N.Y.

Ernest Maggi, Support, Plant 6, died Oct. 12, at the age of 43. He had been with the company since 1965 and resided at 428 Atlantic Ave., Islip Terrace, N.Y.

Retirees

On behalf of our fellow workers, Grumman World salutes the following Grummanites for their contributions to the company and wishes them well in their retirement. Those who have recently retired are:

Clyde G. Chadbourne (44), Elizabeth C. Galia (15), Rudolph Pascucci (7), Joseph Fischer (6), Matthew R. Moss (15), Matteo J. Gaudioso (30), Sylvester S. King Jr. (2), Norman S. Farley (30), John H. Lang (GII), Madeline F. Katala (35), Thomas Coll (12), John C. Conlon (18), Martin E. Dahlem (2), Edith L. Davis (GHQ), Albert Friedl (106), Joseph S. Ledzian (18), William K. Lewis (6), David MacIntosh (25), Charles F. Morris (12), Delwin R. Morrison (30), Harold Perdue (3), Joseph A. Powers (12), Freddie Rivers (12), George Tracy (12), Frank H. Wheaton (20), Paul J. Monaghan (3), Richard M. Wakefield (43), Sam Forman (30), William F. Hejl (2), Frederick E. Annette (25), Anthony M. Cove (30), Mary G. Manis (30), Virginia A. Petruchik (GHQ), Frank J. Suhecki (30), Joseph A. Syracuse (30), Henrietta Walsh (30), R. Ray Weeks (30) Kathryn Zawadzki (GHQ), Robert Baum (25).



On The Outside Looking In. *Plant 13 in Farmingdale, Long Island, now a part of the Flight Test Department, was once owned by Republic Aviation. It boasts a number of wind tunnels, including a supersonic, a hypersonic, and this transsonic tunnel, which instrumentation engineer Dan Harding prepares for a test program.*

Delivery Help Needed. *Food banks in Grumman communities in many parts of the country will have more high protein food to deliver to the hungry in those locales because of Grummanites' donations during the food drive.*

Join The Fight Against Hunger

Grumman Launching Nationwide Food Collection Campaign

Bill Waas was shocked to learn how many people go hungry on Long Island. "Three hundred and fifty thousand people," said Waas, "That's more than 10 percent of the population!"

During the week of November 18-22, Grummanites, not just on Long Island but in the Grumman communities of Washington, D.C.; Milledgeville, Georgia; Stuart, Titusville and St. Augustine, Florida; Glen Arm, Maryland, and Houston, Texas, will have an opportunity to help reduce the pain of hungry people in America. Grumman will hold a major food drive – called "We're setting the table . . . ."

During this week Grummanites are asked to bring high protein goods such as tuna, peanut butter and canned meats and drop them in the collection bins that will be in lobbies and throughout larger Grumman buildings.

According to Waas, the director of Strategic Planning for Data Systems and the coordinator of the drive, there will be signs and banners to mark the location of the bins.

All the donations will be delivered on Friday, November 22 to the local agencies that Grumman is supplying. The only exception is Milledgeville, which will be distributing the food, with the help of the local chapter of the Milledgeville Jaycees, to families chosen by the Department of Family Services or local churches.

At the other sites, the food will go to food banks. "We estimate we serve a quarter million people," says Bernard Kaplan of the Houston Food Bank, which will be helped by donations from Grummanites in that Texas city.

And that's only in Houston. People who gather food for the hungry in the Jacksonville, Florida, area estimate that the food they collect makes some 46,000 meals a month. In the nation's capital, the estimate is 100,000.

Who are these people who go hungry in a land of plenty? "The new poor," Kaplan explains. "These are groups of people who have held steady jobs for years. Houston, years ago was 'Boomtown, USA.' Now, you're finding lots of people who have had energy-related jobs who are out of work. They have families to support. They are white collar workers, blue collar workers, Blacks, Whites, Mexican-Americans . . . ."

Kaplan says the hungry are also the children of single parents, parents who just don't make enough money to feed their kids. Department of Health statistics say that over 500,000 children under six in the U.S. are malnourished.

And then there are the elderly living on fixed incomes who, because of the tremendous cost of health care and housing, must divert money from the pantry to pay for shelter and physicians' fees.

Steve Leinau, the program director of the Long Island Cares food bank, says the malnourished could be the working poor. "These are individuals living right there at the poverty line. One month the family car breaks and where do they come up with four or five hundred dollars to fix a car if they're only making five hundred dollars a month?"

In most cases these families cut the food budget. And it seems that more and more people are finding themselves in such situations. Says Leinau, "All the indications across the country say the number of needy people is increasing."

But so is the awareness of the problems and the sources of help. On Long Island, for example, people who need food might go to local synagogues, Catholic Charities' Parish Outreach programs, the Interfaith Nutritional Network (INN), or the American Red Cross. These not-for-profit agencies run soup kitchens, emergency food pantries, day care centers, senior citizen nutrition sites . . . programs that serve hot meals or give supplies of food to people in need.

One of their major sources of food supplies is the food bank of Long Island Cares, founded in 1980 by the late singer and activist Harry Chapin.

Food banks such as Long Island Cares' are the equivalent of distribu-

One Person Made A Big Difference

"Second Harvest" – the network that will distribute most of the food Grummanites will donate – was named for the way food banks gather fresh produce for the needy. Their volunteers go into the fields after the first harvest and glean – collect – what the harvesting machines left behind.

But the seed for Second Harvest was planted by John Van Hangel, a volunteer working during the late sixties at a church-run soup kitchen in Phoenix, Arizona. According to a spokesperson at Second Harvest, Van Hangel was very good at getting food donations for the kitchen. So good, he collected more than the kitchen could use. The extra food was distributed to other soup kitchens.

His efforts won him a Federal demonstration grant in the 1970s to teach his food collection techniques to others.

Though Van Hangel left the organization, it continued to grow and was incorporated in 1979, establishing headquarters in Chicago.

Second Harvest's primary function is to solicit bulk donations from food manufacturers and producers. In only five short years it has seen donations multiply 30 times, from 2.5 million pounds of food in 1979 to 78 million pounds last year.

It now boasts three regional offices, 78 member food banks and another 112 affiliates, which are smaller banks that receive food from the member banks.

Most of these banks work with small, paid staffs that depend to a great extent on the work of many volunteers. Bernard Kaplan gave one example of that when he talked about the Houston Food Bank. "There are 15 or 20 people on our dock now shovelling potatoes."

torships. The small, paid staff at Long Island Cares, with a tremendous amount of help from volunteers, collects, inventories, tracks and distributes what may amount to four million pounds of food this year.

Long Island Cares stores its food in a small warehouse on the grounds of the sprawling Pilgrim State Hospital in Brentwood, Long Island. It has two small walk-in refrigerators to keep perishables like USDA cheeses, butter and other surplus items, as well as produce that might have been "gleaned" by volunteers from local farms after the harvests. In the rest of the limited storage area might be pallets of Entenmann's cakes, Taystee bread, Quaker oatmeal, cookies... whatever a manufacturer might have donated.

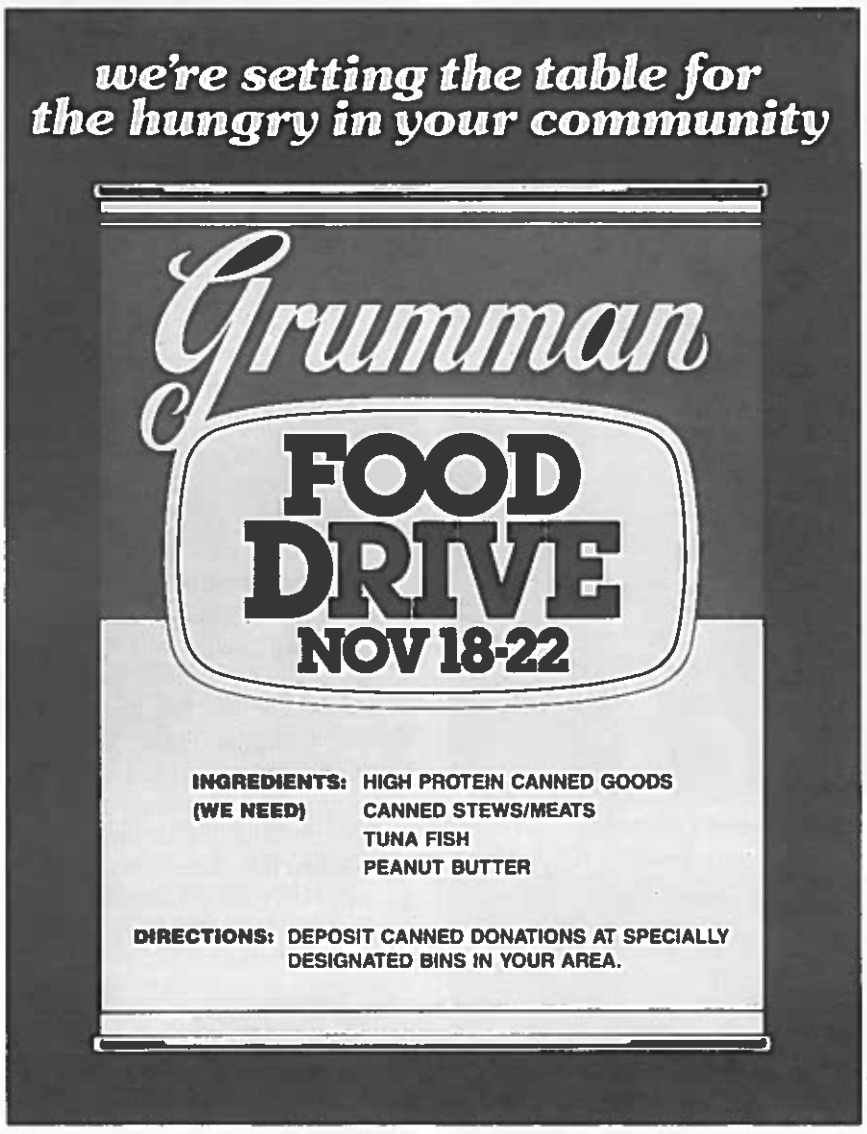
In fact, they receive thousands of pounds of food from manufacturers and distributors. Yet, Long Island Cares and other food banks rely on the cans of tuna and peanut butter that they will get from drives like Grumman's.

"Canned goods in individual or family-size portions simply are not available in any large quantities through donations from food producers," Leinau states.

"With perishable products there's a reason for food producers to move them. Sometimes there are problems with the packaging. There's overbaking with bread products," says Leinau. "With yogurt there's code dating. If it starts to get close to code then there's a donation. With the cereals and such, often they produce more than they can use.

"Canned goods, because they have a long shelf life and because they aren't damaged very easily, aren't donated in any large quantities. So we really rely on the donations in food drives to bring in the canned goods needed by the emergency food pantries." ■

Plenty, But Not Enough. *(Photo at Left) Steve Leinau and volunteer Penny Tarplin of the Long Island Cares Food Bank inventory the donations from food manufacturers. They get lots of bread and cereal and the like, but nowhere near enough canned meats and other high protein foods. The food bank helps agencies such as the Mercy Soup Kitchen in Wyandanch, Long Island, run by Sister Ann Carron (L, photo R). Camille Fie and other volunteers will help her prepare from 75 to 100 lunches each day.*



Sign Of The Times. *Though only a part of Grumman's overall campaign against hunger in America, the food Grummanites will donate will make a big dent in the shortage of high protein food needed in Grumman communities.*

Food Drive Just Part Of The Grumman Effort

The Grumman Corporation board of directors had indicated in 1984 that the company should get more involved in national issues. The Employee Contributions Council, a group of employee volunteers who guide the company's charitable undertakings, recommended that Grumman focus its effort, and major funding, on two areas.

One was helping the frail elderly, the fastest growing segment of American society. The second was hunger in America.

Bill Waas volunteered to chair the anti-hunger committee, made up of Nancy Altmayer, Floyd Cisco, Bill Johnson, Don Sheehan and Harry Volz. They began to tackle the problem early this year.

The Government estimates that 10 million people go hungry in America. And yet, according to the Department of Agriculture, this nation wastes 137 million tons of food each year, enough to feed 49 million people.

Waas says the committee decided that Grumman should help food banks and the agencies they supply. This would be done at several levels.

The food drive would help bring in cans of high protein food, which are always in short supply. It would also help make Grummanites more aware of the problem of hunger in America.

The committee also wanted to deal with some of the long term needs of the agencies that feed the hungry. "We're looking at requests from a number of food banks for things they need to expand their services or just do their job better," says Waas.

Requests have been received from the food bank in Atlanta for warehouse equipment, for food handling equipment needed in Washington and for a hard disk drive for Jacksonville's donated personal computer.

Grumman has made a donation to the Long Island Cares food bank to pay for a bay door on a larger building on the Pilgrim State Hospital grounds that has been given by New York State. Two other donations were made by Grumman to Long Island Cares. One was for a computer system. The other is helping get the bank's "Brown Bag" program off the ground. This program will help get food to even more needy people.

Beyond that, says Waas, "We wanted to balance our contributions a little." So the company made contributions to the Interfaith Nutritional Network, Catholic Charities' Parish Outreach program and the U.S. Council of Churches.

Grumman also made a $25,000 donation to the American Red Cross to help with the famine raging in the African nation of Chad.

Sixteen Named To Division Posts

In mid-October, The Grumman board of directors named 16 people to new posts as division officers. The recent win of several major contracts, together with the corporate realignment, prompted the appointments.

Tom Lahey Jr.

Jim Reed

Norm Reinertsen

Aircraft Systems

Tom Lahey Jr. has been named vice president - Milledgeville Operations in Aircraft Systems.

Lahey joined Grumman in 1962 as a designer of electronic countermeasures, communication, and navigation equipment for the EA-6A and EA-6B. Four years later, he was promoted to assistant to the senior vice president for aircraft programs.

In 1975, Lahey was appointed assistant to the Grumman Aerospace president. He later became assistant to the vice chairman of the Aerospace board. One of his responsibilities was developmental planning for a new composites manufacturing center.

When the center opened in Georgia in 1975, Lahey was named deputy general manager. He became general manager in 1984.

Jim Reed is now program vice president for the Consolidated Automated Support System (CASS) program. In August, Grumman received a pre-full scale development contract for this program.

CASS will become the Navy's standard automatic test equipment (ATE) for aircraft, ship, and submarine electronics.

Reed served in the U.S. Air Force from 1953 to 1957, attaining the rank of staff sergeant. A New York State and Louisiana certified teacher, he worked as a computer instructor for RCA, then joined Grumman in 1960 as an E-2A avionic training instructor. He later became an E-2A avionic technical representative.

Reed's more recent assignments have included Integrated Logistics Support (ILS) program manager for the E-2C, manager of ILS systems engineering, and CASS program director.

Norm Reinertsen has joined the division as its vice president of Operations Analysis. He most recently was senior vice president for the Vehicle Division at Grumman Allied.

Reinertsen joined Grumman in 1960 and spent his first years with the company working in product support, on the Lunar Module and other projects. He became general manager of the electron beam welding department in 1972 and first moved into the non-aerospace world when he served as director of operations for Grumman Health Systems from 1974 to 1976. In 1976, he moved back to Grumman Aerospace as general manager of Great River Operations.

He was appointed vice president-automotive products for Grumman Allied in 1977, and executive vice president of Grumman Flxible in 1979. From January 1983 to January 1985, Reinertsen was president of Grumman Olson.

Allied Division

John Ohler has been named vice president - marketing for the Allied Division, while *Frank Rizzo* is its new controller.

Ohler joined the company in 1946 and most recently was deputy director of the Grumman Corporation Western Regional Office. He began his career as a flight test project analyst. He later became an aerodynamicist – responsible for aerodynamic design and testing of military aircraft under development.

When Grumman was diversifying during the late Sixties, Ohler was made study director - civil systems for the operations analysis department.

As assistant manager - special projects for operations analysis, Ohler conducted studies to support F-14 and A-6 marketing. From 1977 to 1981 he was assistant to the chief executive officer of Grumman Energy Systems.

Rizzo previously was controller of the St. Augustine Division. He joined Grumman in 1966 as financial manager for Lunar Module (LM) subcontract management. Two years later, he became accounting manager for the entire LM program.

From 1970 to 1973, he was staff assistant to the director of Accounting for Grumman Aerospace. For the next seven years, he was manager of corporate financial projects for Grumman Corporation.

Rizzo relocated to St. Augustine in 1980 to head up accounting, finance, and data processing operations there. He was named controller earlier this year.

Bill Bruns has been named vice president of Grumman Emergency Products, an operating unit of the Allied Division. He had previously been director of sales and service for the Roanoke, Virginia, concern.

Gerry Sandler

Bruns started at Grumman in 1966 following two years as a sergeant in the U.S. Army. He began his career as a manpower planner and later was promoted to manager of corporate budgets for Grumman Aerospace. From 1975 to 1977, Bruns worked in Iran as director of resources for the F-14 program there.

Upon his return to the U.S., Bruns became deputy director of Business Analsysis for Aerospace. He switched to the parent corporation in 1980, assuming the post of assistant to the vice president for corporate development. He moved to Emergency Products in '82.

Data Systems

Gerry Sandler is the Data Systems Division's new senior vice president - information systems.

Sandler came to Grumman in 1963 after working as a systems engineer for Sylvania and RCA. After first working as assistant section chief - reliability engineering, Sandler was promoted to program manager of Lunar Module (LM) modifications. He later became the LM program's deputy director.

His most recent positions in Grumman Aerospace were as director of software systems and deputy department head - Engineering. He then moved to Grumman Data Systems as vice president - technical operations.

Sandler is an adjunct professor of engineering and computer science at both Hofstra University and Polytechnic Institute of New York. He is

John Ohler

Frank Rizzo

Bill Bruns

Howard Broderson

Al Picarelli

Steve Dely

Charles Esposito

Doug Hunsworth

the author of the text *System Reliability Engineering*, published by Prentice-Hall.

Howard Broderson, vice president for business operations, had most recently been project manager for the Test Instrumentation System (TIS) program for the U.S. Air Force in Tullahoma, Tennessee.

Broderson joined Grumman in 1965 as a subcontract administrator for Lunar Module procurement. He later worked on the F-14 proposal and became subcontract project manager for the F-14 program.

In 1971, Broderson moved to the Data Systems Division as purchasing manager for its material department. He later was named assistant director of contracts for GDS. When the two departments were combined, he was named deputy director of contracts and material.

Al Picarelli is now Data Systems vice president - program management. He had been director of the division's management information systems (MIS) program office since 1984.

A Navy veteran, Picarelli worked for Texas Instruments and General Dynamics - Electric Boat before joining Grumman in 1966 as a programmer-analyst. In 1975, he became assistant director - business systems for Data Systems. He was named director of systems development for the division in 1978.

Picarelli is a contributor to two books on computerized cost control systems and material management systems.

Electronics Systems

In Electronics Systems, *Steve Dely* has been named vice president for resources and administration, and *Charles Esposito* program vice president, Intermediate Forward Test Equipment (IFTE).

An Army veteran, Dely achieved the rank of captain in the Military Police Corps. He is a lawyer and joined Grumman Allied in 1971 as corporate counsel and director of personnel services.

His later assignments with the division were: assistant secretary, general counsel, secretary, and vice president for human resources.

In 1982, Dely moved to the parent corporation to serve as director of human resources. During that time he also spent five months in Washington on the President's Private Sector Survey on Cost Control.

Esposito joined Grumman in 1963 as an electronics engineer in the Integrated Logistics Support (ILS) department. Five years later, he was promoted to deputy program manager of Versatile Avionic Shop Test (VAST). He later spent a year on a Navy VAST Technical Advisory Group.

Upon its completion, he became a project engineer for automatic test equipment (ATE). In 1978, he was promoted to ATE engineering director. He assumed his most recent post in 1983, as deputy director of Test Equipment Products for the Electronic Systems Division.

IFTE will be the Army's next-generation automatic test equipment (ATE), and Grumman signed a full scale development contract on September 18.

Al Verderosa

Joe DeRiso

Dan Terry

Art Hudson Jr.

International

In Grumman International, *Joe DeRiso* has been appointed treasurer and controller. Grumman International handles foreign sales of products and services from all Grumman divisions.

DeRiso began his Grumman career in 1974 as an accountant in the Grumman Aerospace general accounting department. In 1975 he switched to International, taking a position as senior accountant. He was later promoted to manager of accounting.

In February of 1984, DeRiso was appointed assistant treasurer of Grumman International.

Melbourne Systems

Al Verderosa has been appointed president of this new division, which will eventually be headquartered in Melbourne, Florida. The division has been set up to handle the Joint Surveillance Target Attack Radar System (Joint STARS) contract, which Grumman won on September 27.

After serving with the U.S. Army Corps of Engineers in Heidelberg, Germany, Verderosa joined Grumman in 1956 as an electronics engineer. He went on to become assistant project engineer for the HU-16 program, S-2 project engineer, and EA-6B assistant subsystems project engineer.

Later in his career, Verderosa became program director for the E-2C/C-2/M161 programs. His most recent assignment was as vice president and director, Aircraft and Marine Programs, for Grumman Aerospace.

Dan Terry is the division's program vice president for Joint STARS. Terry came to Grumman in 1975 following a career as a Naval aviator. He is a graduate of the U.S. Naval Academy and had attained the rank of captain when he retired from the service in 1974.

Terry's first assignment at Grumman was in the E-2C program staff. He was promoted to director of future applications for Aircraft and Marine Programs, and then director - foreign applications.

Prior to his appointment as vice president, he had been director of the Joint STARS program since 1983.

Art Hudson Jr. has been named controller for the Melbourne Systems Division. A Navy veteran, Hudson joined Grumman in 1967 as an account analyst in Accounts Payable. In 1969, he was promoted to group leader in that department, and in 1971, he became a senior accountant in general accounting.

Hudson moved to Grumman International in 1974 as a senior accountant. He was elected controller of the division in 1977, and treasurer as well in 1979. He had held the combined position ever since.

St. Augustine

Doug Hunsworth is the new controller at Grumman St. Augustine Division, which specializes in the modification, overhaul and maintenance of Grumman and non-company aircraft.

Hunsworth started at this Florida division in September of last year as a systems analyst. Before moving to Florida, he had worked for Siemens-Allis, Inc., of Pennsylvania for seven years, most recently as operations manager.

Hunsworth began his career as a systems analyst for Arthur Andersen & Company in Philadelphia. He later became a senior auditor and certified public accountant there.

GrummanWorld
November 8, 1985

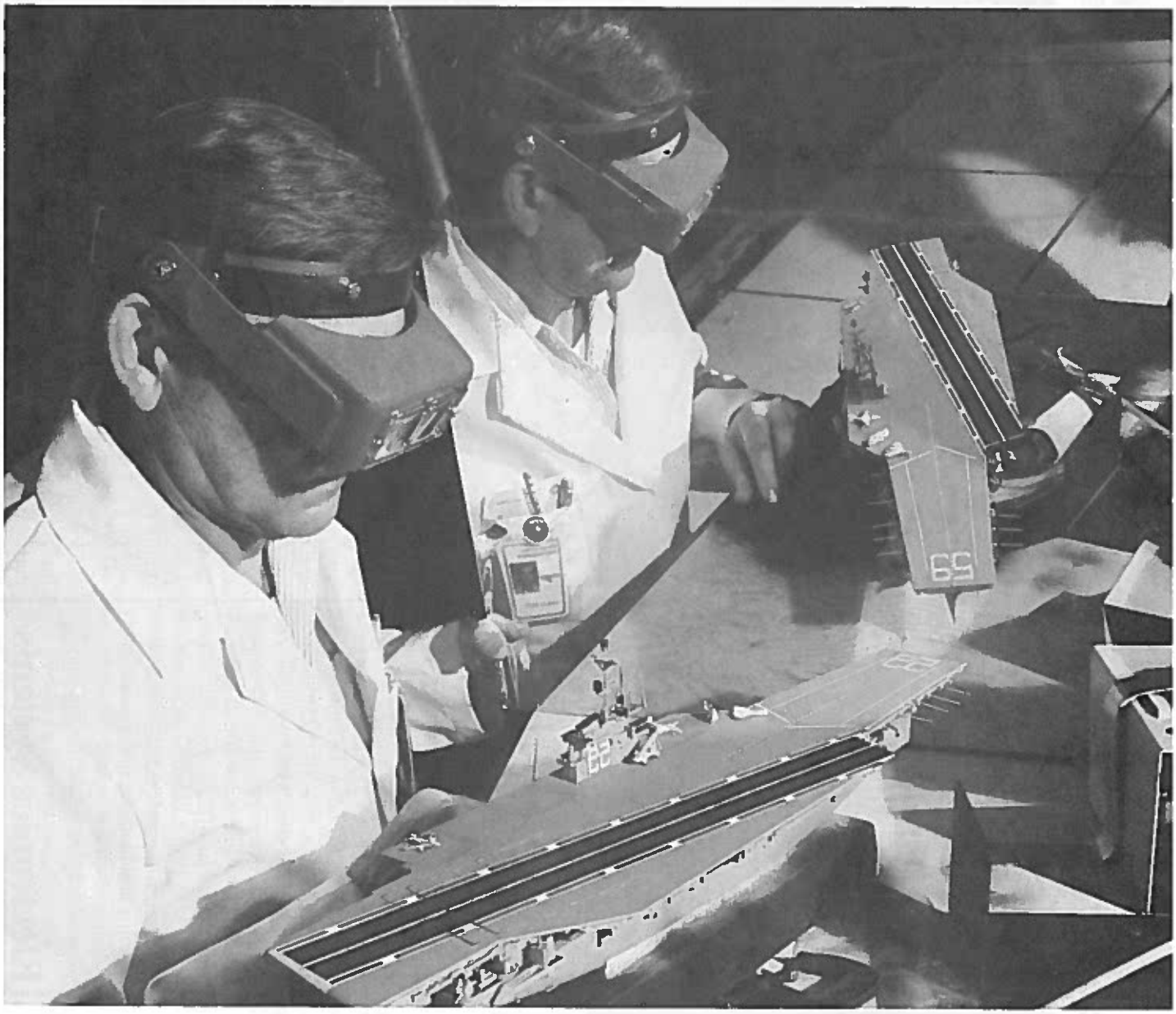
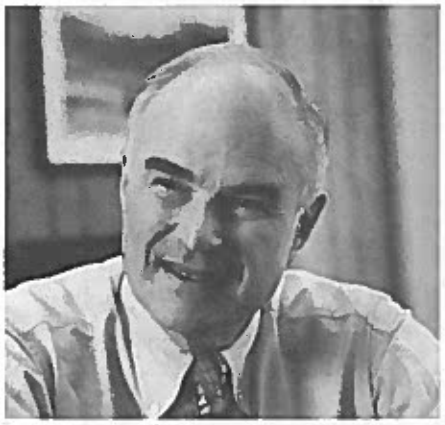


Photo by Bob Settles

Less Than Meets The Eye

There is really only one miniature aircraft carrier and one Charlie Falco, electronics technician, in this picture. The real Falco (left) and the ship model he is holding are part of Grumman's Carrier Approach Simulator System. The system, located in the Flight Simulation Lab at Bethpage's William T. Schwendler Engineering Development Center, is used by pilots to test new carrier landing techniques and aircraft flight characteristics. The 1/500-scale model was custom built by Grumman wire technician and hobbyist Earl Baker. Falco is holding the ship model in front of a mirror to show its reversed construction and paint job. The mirror-image construction compensates for an odd number (21) of optical surfaces in the sophisticated camera system used in the simulation lab. Falco's magnifying glasses enable him to see the minute details on the model. The system is currently being used in the development of equipment for the F-14D and A-6F programs as well as in the continued testing of the X-29.

A Letter From The Chairman



When I talk to securities analysts on Wall Street, I sometimes tell them that Grumman puts wings on electronics.

That's an oversimplification of what we do, of course, and it doesn't define all the other efforts that make up our business profile. But I think it communicates to them our emphasis on electronics as Grumman heads for the 21st century.

The formation of an Electronics Systems Division was a natural outgrowth of that emphasis, because we've really been in the electronics business for years.

Our new divisional structure aims to match our organization to our markets; to give our customers direct access to that portion of the company that concerns them. The creation of the Electronics Systems Division fulfills an act of faith: we invested for years and worked to develop our electronics capabilities, sometimes with no early visible success. But that faith has been rewarded with a number of new contracts and a growing reputation as a developer of sophisticated electronics.

Our expertise came from building more clout into our airplanes. The E-2C, for instance, is a 25-year-old airframe. But the systems packed inside are constantly being upgraded — and today, the Hawkeye's airborne early warning capabilities are worlds beyond what its developers ever imagined.

Along with enhancements to the systems inside the planes came the need for support equipment to match. That equipment is used to check out the Tomcats, Hawkeyes, Intruders and Prowlers and keep them flying off carrier decks. Young people just a year or two out of high school are the most frequent users of the equipment, and Grumman has worked hard to make it efficient, reliable, and easy to use.

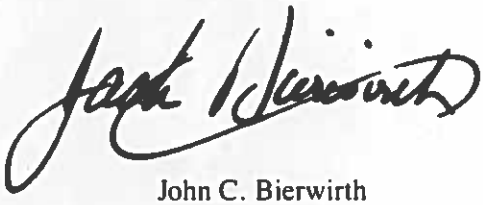
Just a few months ago, Grumman was named a finalist in the competition to build the Consolidated Automated Support System (CASS), the Navy's next generation of automatic test equipment. CASS will be a standardized system that will replace the clutter of current test equipment. The Aircraft Systems Division is managing the Grumman effort, with the Electronics Systems Division, General Dynamics and Hughes teamed as major subcontractors.

Grumman's talent for rugged test equipment has the U.S. Army's attention, too. In September, Grumman won the competition to develop the Army's Intermediate Forward Test Equipment (IFTE). IFTE will be used in the field to troubleshoot Army weapon systems. Development work is being done by the Electronics Systems Division.

In a way, the Melbourne Systems Division, the group working on Joint STARS, is like a second electronics division. It represents another track, a further refinement of our abilities.

The Electronics Systems Division isn't just the result of hard work; there was a fair amount of luck involved, too. Luck in choosing the right people with the right talents; luck in choosing the right projects to compete for. But now, we have the facilities, the product lines and the management structure to permit the division to grow. It will develop its own character, seek its own opportunities.

And it's going to be exciting to watch it take off.



John C. Bierwirth
Chairman

GrummanWorld
A22-GHQ
1111 Stewart Avenue
Bethpage, N.Y. 11714

Bulk Rate
U.S. Postage
Paid
Hicksville, NY
Permit No. 1110